



# FLANDERS OUTLOOK 2010



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Studiedienst van de  
Vlaamse Regering



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A RENEWED BENCHMARKING OF FLANDERS AMONGST THE EUROPEAN REGIONS

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February 2010



Research Centre of the  
Flemish Government



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# 1 INTRODUCTION

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In 2006, Flanders launched the plan 'Flanders in Action' which aims to strengthen Flanders' economic and innovative potential to turn it into one of the top European regions in 2020. Today, Flanders is a prosperous region. However, this does not guarantee that the same degree of prosperity can be acquired in the future, as the European countries and regions are facing many challenges, such as globalisation and the shift of industries, climate change and changing migration patterns. Each of these countries and regions will have to respond to these challenges in their own way.

This text is not a thorough analysis of the socio-economic situation of the European regions. Rather, it aims to detect those regions that are yet a step ahead in the development towards truly innovative regions. This document thus wants to depict how Flanders is positioned in comparison to those 'excellent' regions. In the recent past the Research Centre of the Flemish Government already did such exercises<sup>1</sup>. This analysis is an update of the determination of the benchmark regions, based on the most recent data available. As a result, the benchmark list has changed slightly in comparison with previous analyses. On the basis of innovative indicators the benchmark list now<sup>2</sup> consists of:

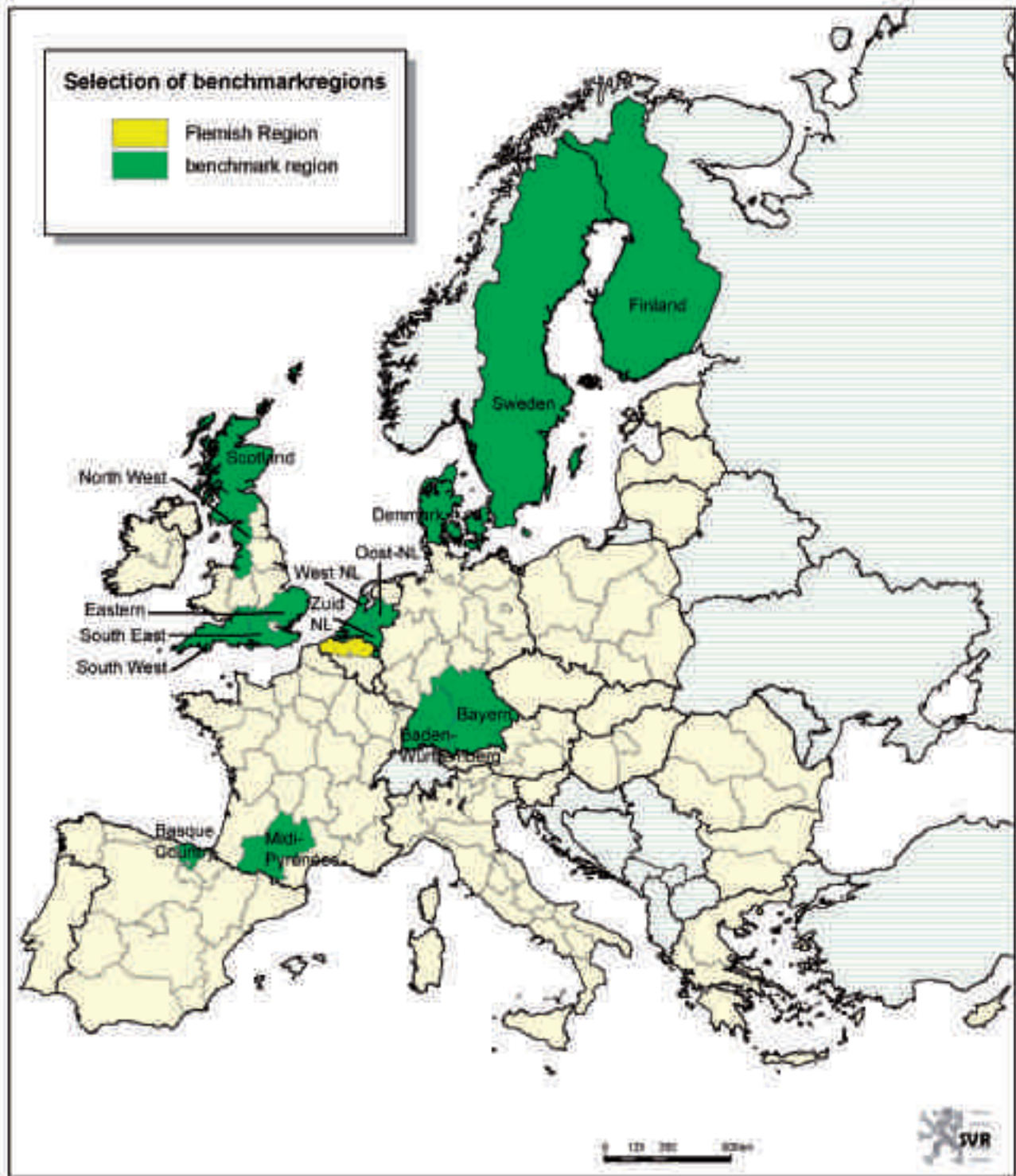
Denmark  
Baden-Württemberg  
Bayern  
The Basque Country  
Midi-Pyrénées  
Oost-Nederland  
West-Nederland  
Zuid-Nederland  
Finland  
Sweden  
North West (UK)  
Eastern (UK)  
South East (UK)  
South West (UK)  
Scotland

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1 E.g. 'Flanders Outlook - What is the socio-economic position of Flanders in the Europe of the Regions?', December 2008.

2 With respect to previous analyses, Midi-Pyrénées and Oost-Nederland have entered the selection and Hessen and East Midlands (UK) have disappeared.

Map 0: Selection of benchmark regions, 2009



The broad picture is more important than the focus on Flanders' position in the rankings. The benchmark regions usually perform better than Flanders. A few years ago, however, Flanders scored relatively higher on some factors. This is due to the fact that the benchmarking exercise was carried out on the basis of the most recent data. Consequently, this is not an analysis of how the benchmark regions have evolved, but rather of the Flemish socio-economic performance during these past years.

The following indicators are taken into consideration in the analysis:

- **per capita GDP** and its constituent parts: labour productivity (defined as GDP divided by total employment), the number of jobs in relation to people aged 15-64 y and the share of the population aged 15 to 64. This is a well known decomposition of GDP per head;
- **the average wage per worker and the wage cost per unit of production** (or wage share in gross value added). These are competitiveness indicators;
- **the employment rate**, or the ratio between the working population and the population aged 15-64, is an important parameter for the labour market. It is also used internationally for tracking policy objectives, including the Lisbon strategy. There is also a focus on the 55-64 age category;
- **the unemployment rate** (ILO definition). In addition to GDP per capita, this is a key indicator that the European Commission uses to track its regional policy. Here too there is a focus on a number of sub-groups including men, women and the long-term unemployed;
- **employment in the (medium HT and HT industry and in the knowledge intensive HT services**. Economic branches are categorised as such based on a Eurostat and OECD classification according to the use of R&D in the production process. These variables are an indication of the extent to which the knowledge economy has penetrated in the various regions;
- **the share of workers with a tertiary level of education** (higher education) is an indication of the talent present in a region;
- **patent applications** measure whether research efforts result in products and services. However, this indicator has limitations: a patent application is not made for all applied research and the resulting products. Furthermore, not all patented products are successful (i.e. if these products are not sold, or are difficult to sell, they make no contribution to added value creation);
- **research and development expenses as a % of GDP** measure how much a region is investing in research and development. However, nothing is said about commercialisation of this research and development. In addition to the total for all actors, this indicator is also calculated for business and government separately;
- **the share of employment in knowledge creative industries** is a fairly new indicator which denotes the presence of human potential to generate creative, innovative products and services. These are essential for a economy in an advanced stage of development where growth can no longer be achieved merely by input of capital and labour or through efficiency.

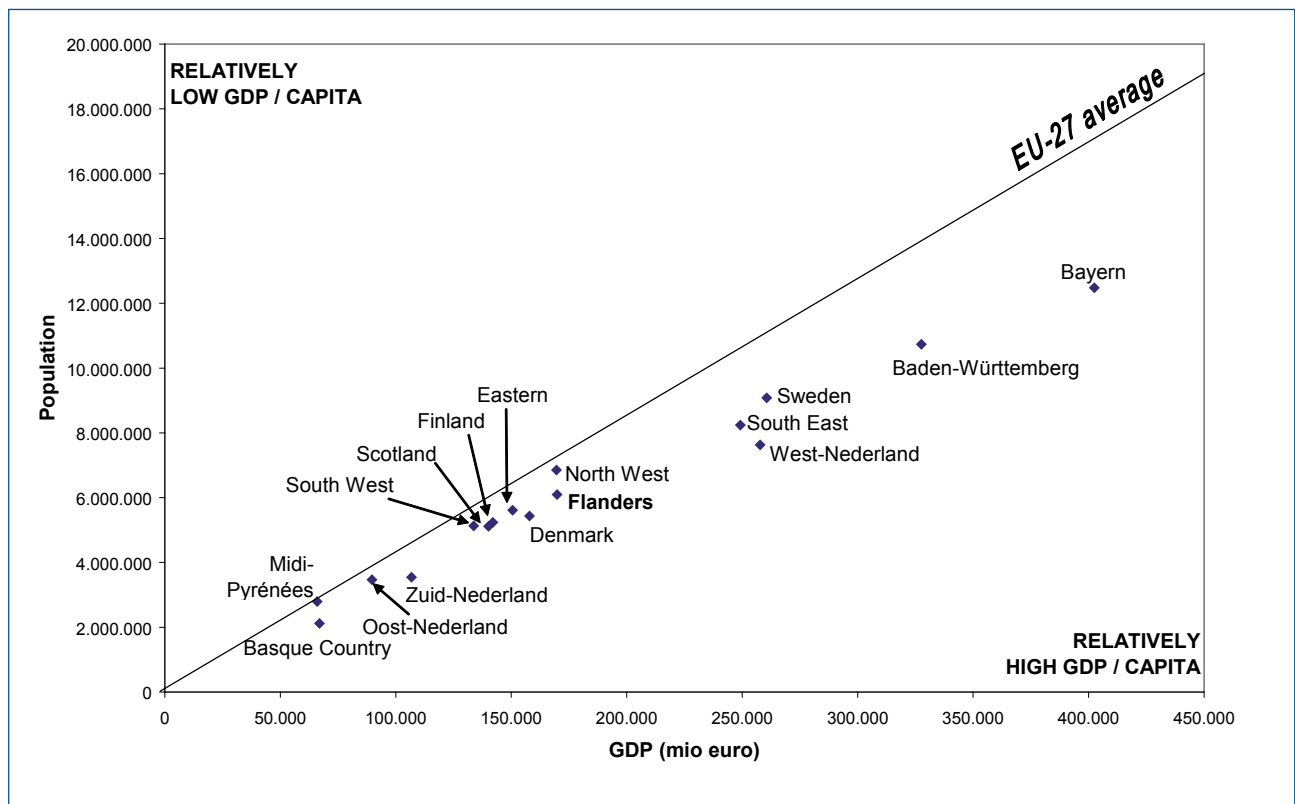


## 2 ECONOMIC WELFARE

**Gross domestic product (GDP)** is a broad measure of welfare generated in a country or region. GDP data of regions or countries within the European Union are compared on the basis of purchasing power standards (PPS). In this way price differences in relation to income are accounted for.

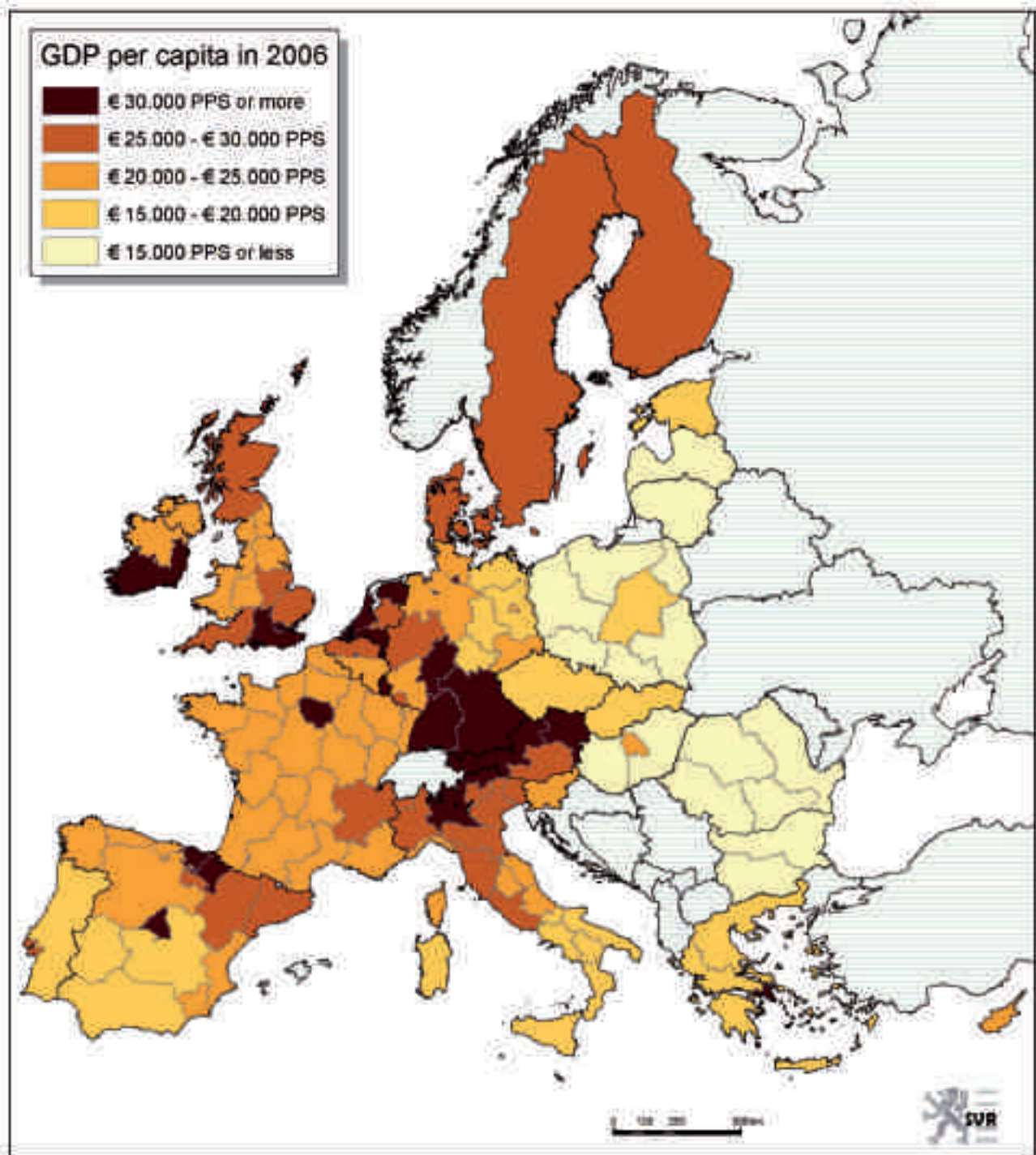
Flanders is one of the prosperous Western European regions. According to official Eurostat data the gross domestic product of Flanders amounted to € 27,859 PPS per head in 2006. Ever since 2003, Flanders has thus ranked 9th among the 16 benchmark regions. During previous years the Flemish GDP was relatively higher (5th place in 1995). The German benchmark regions, Zuid- en West-Nederland, Denmark and Sweden, the Basque Country and the British South East all had a higher GDP per capita than Flanders in 2006. On the other hand, the value for Midi-Pyrénées is quite low (€ 23,650 PPS). In 1995 none of the British regions performed better than Flanders. The evolution of the Basque Country is remarkable. Whereas its position was mediocre in 1995, today it is ranked among the top three.

Graph 1: GDP per capita in 2006



Source: Eurostat, Research Centre of the Flemish Government

Map 1: GDP per capita in 2006

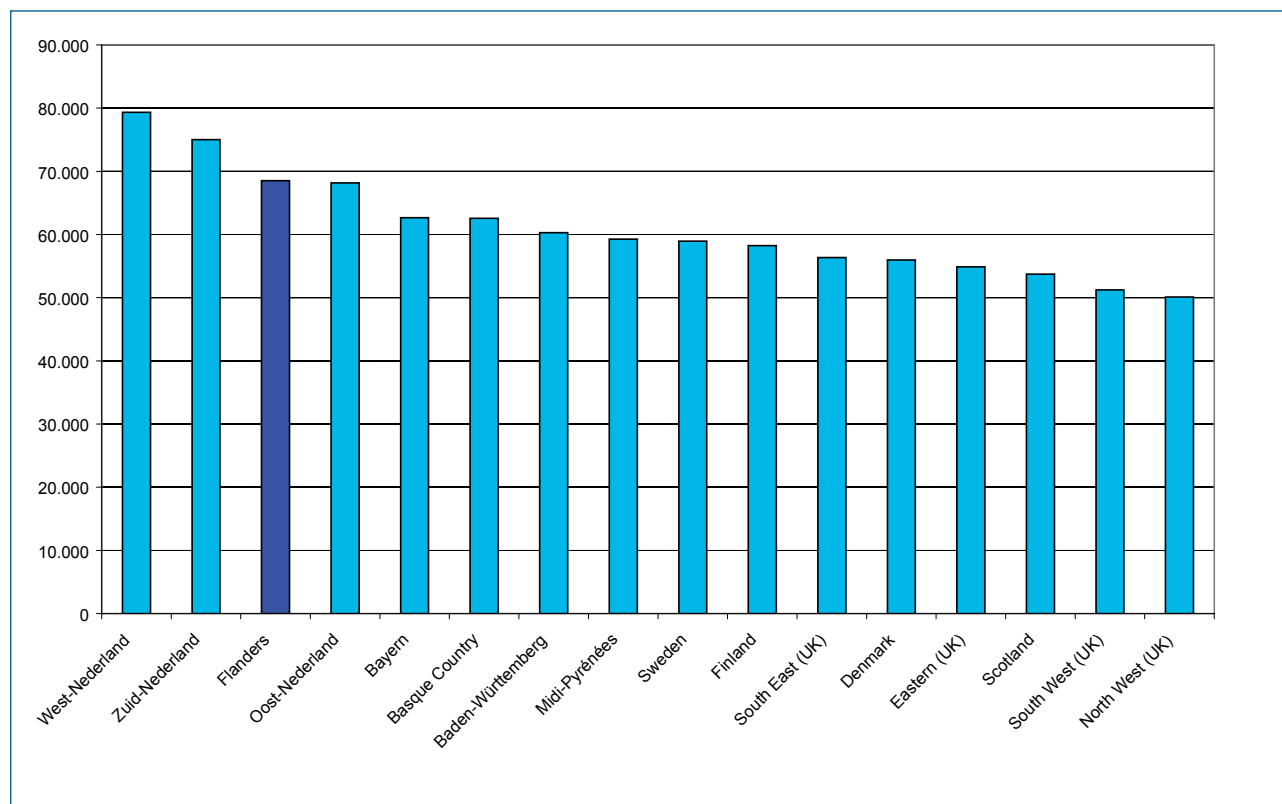


The capital city of Brussels does not belong to the geographical territory of Flanders. A great part of the Flemish administration is located in Brussels, as is the case for many of the bigger companies. Furthermore, a lot of Flemish people commute to their work in Brussels and thus contribute to the Brussels GDP (instead of the Flemish). In an overall ranking which also contains capital cities, Flanders cannot claim an outstanding position: in 2006, Flanders was ranked at the 31<sup>st</sup> position among the total of 131 European regions, which is still within the first quartile. The top performers are Luxemburg (€ 63,109 PPS), Brussels Capital Region (€ 55,111 PPS) and Hamburg (€ 47,188 PPS), followed by more capital city regions. In 2005, Flanders also ranked 31<sup>st</sup>. Over the last years the Flemish position went up and down, but in 1995 its ranking improved to the 26<sup>th</sup> position.

The **GDP per head** can be broken down into three factors: labour productivity, the number of jobs per C[15-64] and the share of C[15-64] in the population<sup>3</sup>. An analysis of these factors sheds light on how prosperity is created.

High **labour productivity** is an asset for the Flemish economy. With a value of € 68,507 PPS per worker Flanders was in third position among the 16 benchmark areas in 2006. West- and Zuid-Nederland are more productive. Oost-Nederland is catching up with Flanders. Throughout the years labour productivity has always been relatively high in Flanders. It is the key factor of our prosperity. The British regions do not excel in this respect. Within a broader perspective of 131 European regions Flanders is placed at an excellent 11th position, preceded by a number of capital areas.

*Graph 2: Labour productivity in 2006 (in € per worker)*



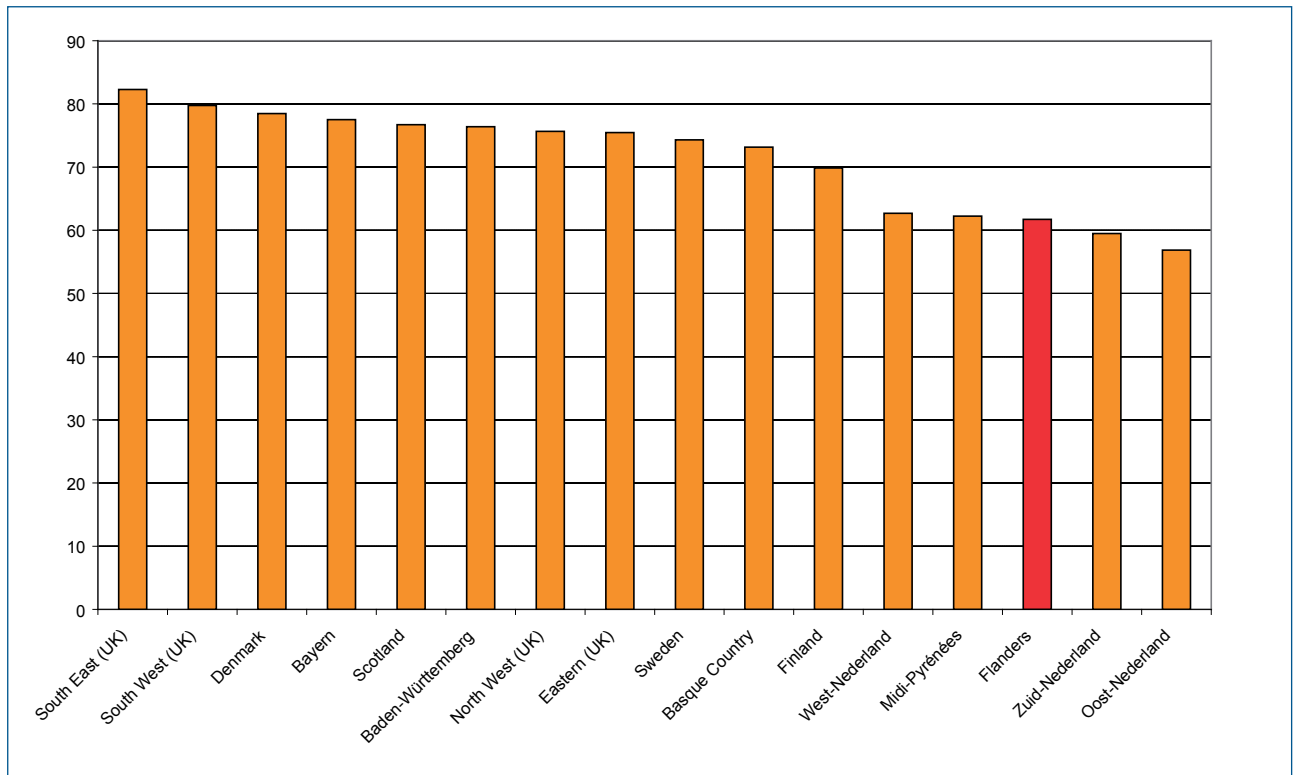
Source: Eurostat, Research Centre of the Flemish Government

The number of jobs among people aged 15-64 is relatively low in Flanders (61.7% or a 14th position among the 16 top areas). Two of the three Dutch benchmark regions have lower values. The ratio slightly improved in Flanders during the last years, but in relative terms the situation was slightly better in 1995 when Flanders also preceded West-Nederland and the Basque Country. The British and German regions as well as Denmark score high on this indicator. Among the 131 EU regions Flanders is in the 85th place. However, since 1995 Flanders has gained some places (91st in 1995).

The mediocre performance of Flanders partly results from the fact that quite a lot of people commute to the Brussels capital. Due to the small geographical area of the Brussels Capital Region the place of living (income) and the place of working (employment and generation of GDP) are located in two different areas.

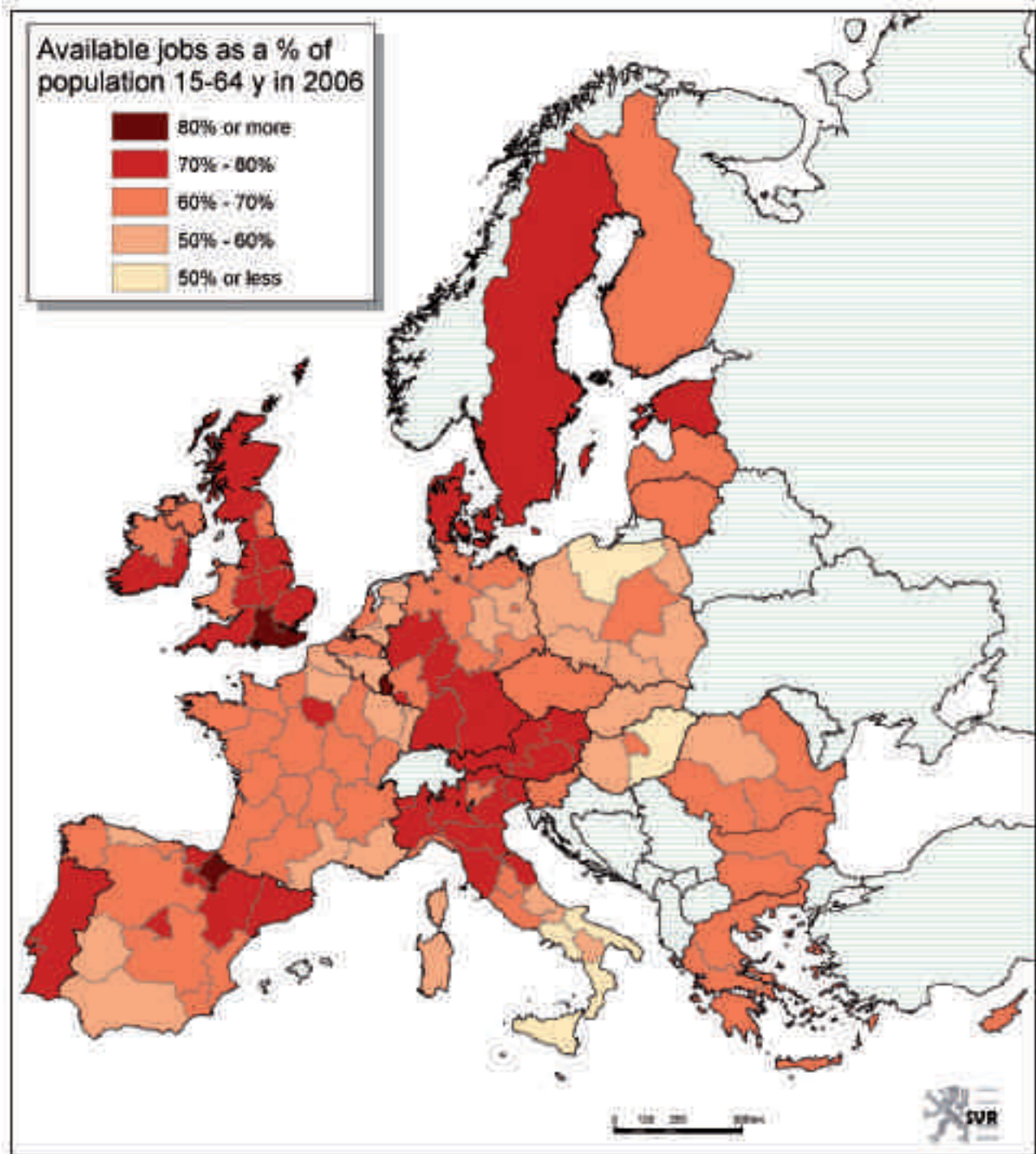
<sup>3</sup> C[15-64] stands for the population aged 15 to 64.

Graph 3: Available jobs / population aged 15-64 in 2006 (in %)



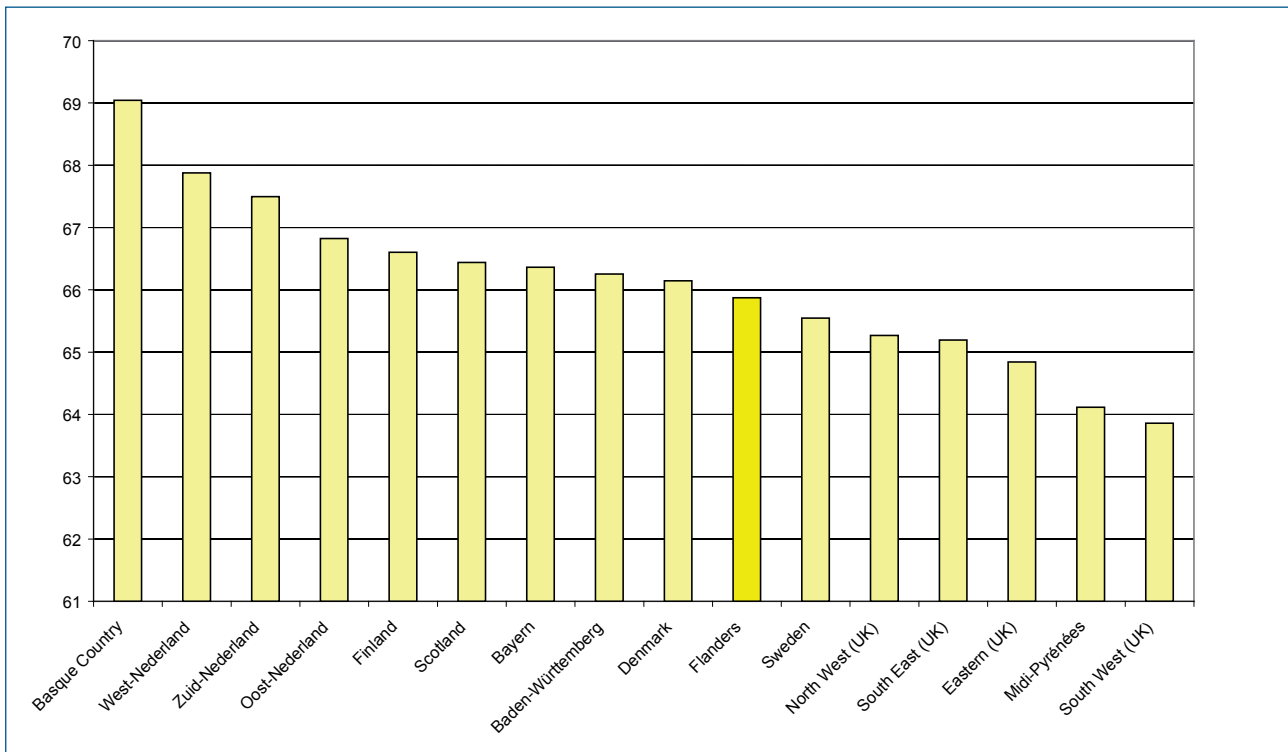
Source: Eurostat, Research Centre of the Flemish Government

Map 2: Available jobs as a percentage of population aged 15-64 in 2006



The last factor is **the share of people aged 15 to 64**. With 65.9% in 2006 Flanders held the 10th position among 16 benchmark regions. Eleven years earlier, the value was 1 percentage point higher. Flanders also lost two places in the ranking. Throughout the period concerned the Basque Country had the highest share of people of active age. However, this same indicator is also decreasing the fastest in the Basque Country. The British regions (except for Scotland) all have a lower value than Flanders, but this gap is gradually being reduced. Compared to the whole of Europe, Flanders was ranked 83rd. Since 2000, this relative position did not vary much, but in the second half of the nineties, Flanders quickly lost ground (66th place in 1995). The Slovak and Czech Republics and the Polish regions excel on this indicator, whereas many French areas score particularly low.

Graph 4: Share of population aged 15 to 64 in 2006 (in %)



Source: Eurostat, Research Centre of the Flemish Government

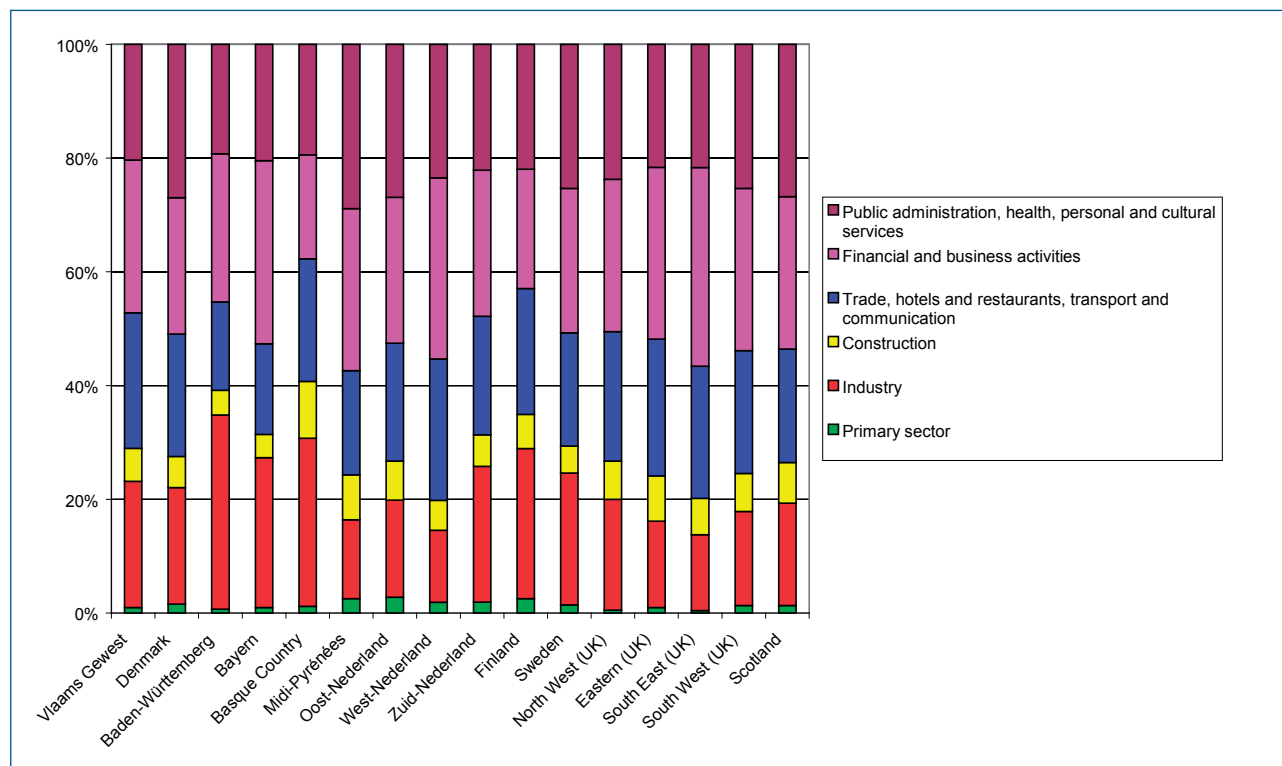
The **average wage cost per employee** is relatively high in Flanders. Only the 3 Dutch benchmark areas have higher average costs. In 1995, however, Flanders had the highest wage cost amongst the benchmarked regions. It is not surprising that the new Member States have the lowest value for this indicator. The average wage cost per employee must be considered in relation to labour productivity. The ratio between these two indicators is the unit wage cost. In Flanders wages accounted for 56% of gross value added in 2004. Only four of the benchmark regions performed better (i.e. lower). This is slightly better than three years earlier (6th place). In 1995, only Midi-Pyrénées had a lower unit labour cost. In a broader European perspective Flanders holds the 77th position (ranking from lowest to highest). Not surprisingly, the Romanian and Bulgarian regions as well as the Greek Attiki have the lowest unit labour cost.

A region can be an important producer of welfare, but this does not necessarily mean that the income it generates accrues to the inhabitants of that region. When people commute, their place of living and working can be in different geographical locations. The **net disposable income** in Flanders amounts to € 16,548 PPS **per head** (based on final consumption). This allows for an 8th place amongst the 16 benchmark regions. Several British regions (including South East with € 20,089 PPS) perform better. The German Länder concerned and the Basque Country also have a higher income per inhabitant. The Scandinavian countries score the lowest in this comparison. The position of Flanders has gradually worsened over the years. In 1995, it held 3rd position and was only preceded by Baden-Württemberg and Bayern. Due to a lack of data for the whole range of areas, it is impossible to rank Flanders amongst 131 regions.

The **economic structure** of the benchmark regions is as follows (based on gross value added in 2006): the primary sector is not really important in any of the regions. It is relatively well represented in Oost-Nederland, Midi-Pyrénées and Finland. Baden-Württemberg (34.1%) and the Basque Country (29.1%) are the most industrialised regions. Industry is significantly less important in the value added of West-Nederland and the British regions. The share of construction in the Basque Country is relatively high (10.0%) in comparison with the other benchmark areas. It is more than twice as important as in the German Länder or Sweden. The branch of 'trade, hotels & restaurants, transport and

communication' is best represented in West-Nederland, Eastern (UK) and Flanders (almost 25%). 'Financial and business activity' is the most important activity in South East UK, Bayern and West-Nederland (all over 30%). Finally, public administration, health and personnel services are a specialty in Midi-Pyrénées (28.9%). Flanders has a relatively low share. This is due to the presence of Brussels which performs such functions for a broader hinterland.

Graph 5: Share of the economic sectors in gross value added in 2006 (in %)

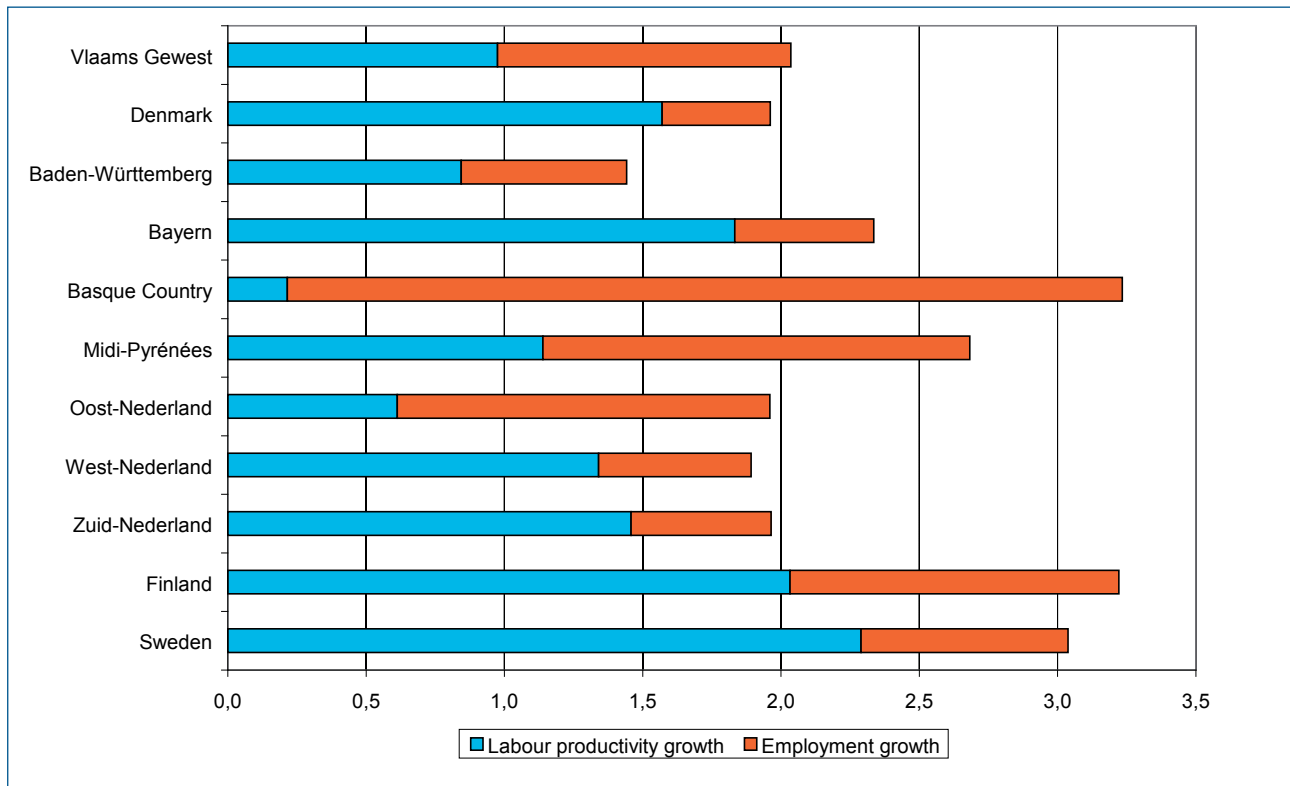


Source: Eurostat, Research Centre of the Flemish Government

During 2000-2006, **real GDP growth** in Flanders amounted to 2.0% a year. This encompassed years of economic booming (the years 2000 and 2006) as well as years of sluggish growth (period in between). Flemish growth is somewhat in the middle of what other benchmark regions realised (no data were available for the British areas). The Basque Country, Finland and Sweden were the strongest growers (> 3% per year), closely followed by Midi-Pyrénées (+ 2.7%). Baden-Württemberg's performance, on the other hand, was quite weak (+ 1.4%).

GDP growth can roughly be broken down into growth of labour productivity and of employment. The recipe for growth differs from region to region: In Flanders the contribution of labour productivity and of employment was more or less equal during the period concerned. In most other benchmark areas labour productivity growth was dominant, notably in Sweden (+ 2.3%) and Finland (+ 2.0%). However, in the Basque Country employment growth was almost entirely responsible for its GDP expansion: with an annual average of + 3.0% it leaves all other benchmark regions far behind. In Midi-Pyrénées and Oost-Nederland employment growth was also more important. In the latter case this contrasts with the two other Dutch benchmark areas.

Graph 6: Components of real GDP growth, average of 2000-2006 (in percentage points)



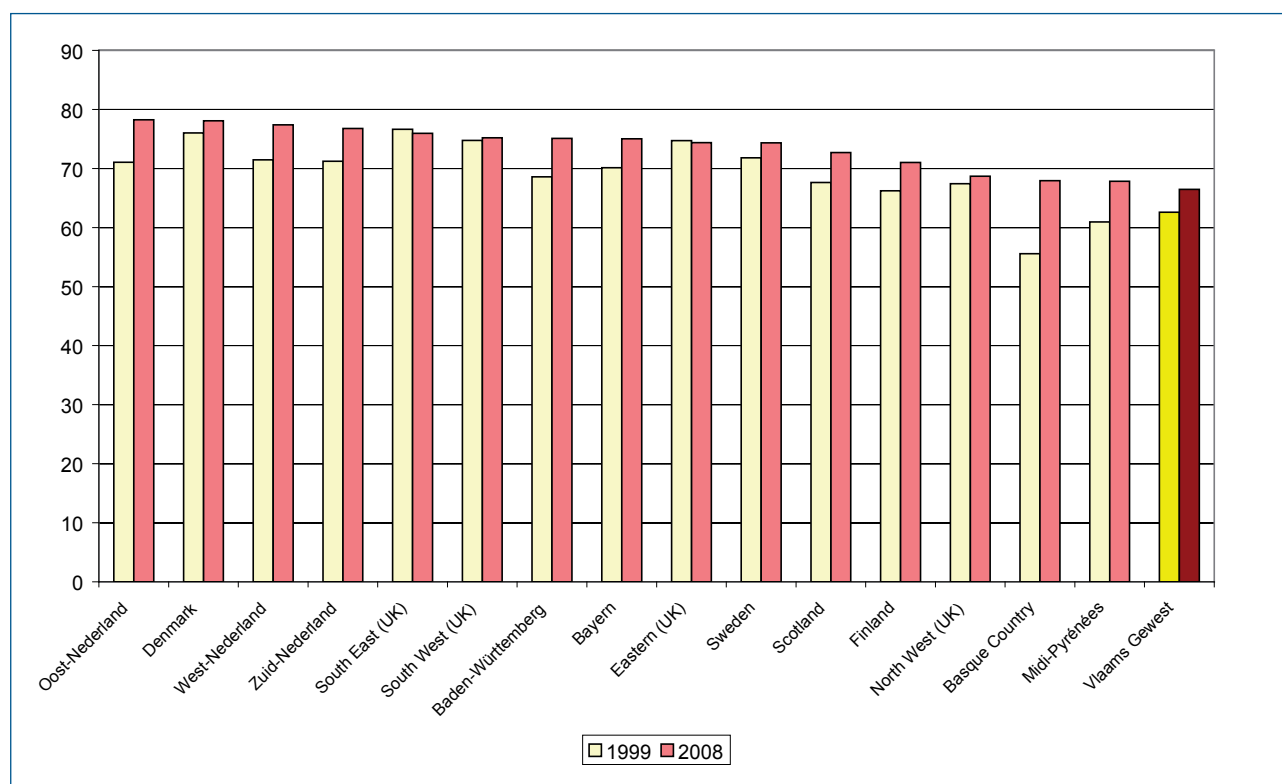
Source: Eurostat, Research Centre of the Flemish Government



### 3 LABOUR MARKET

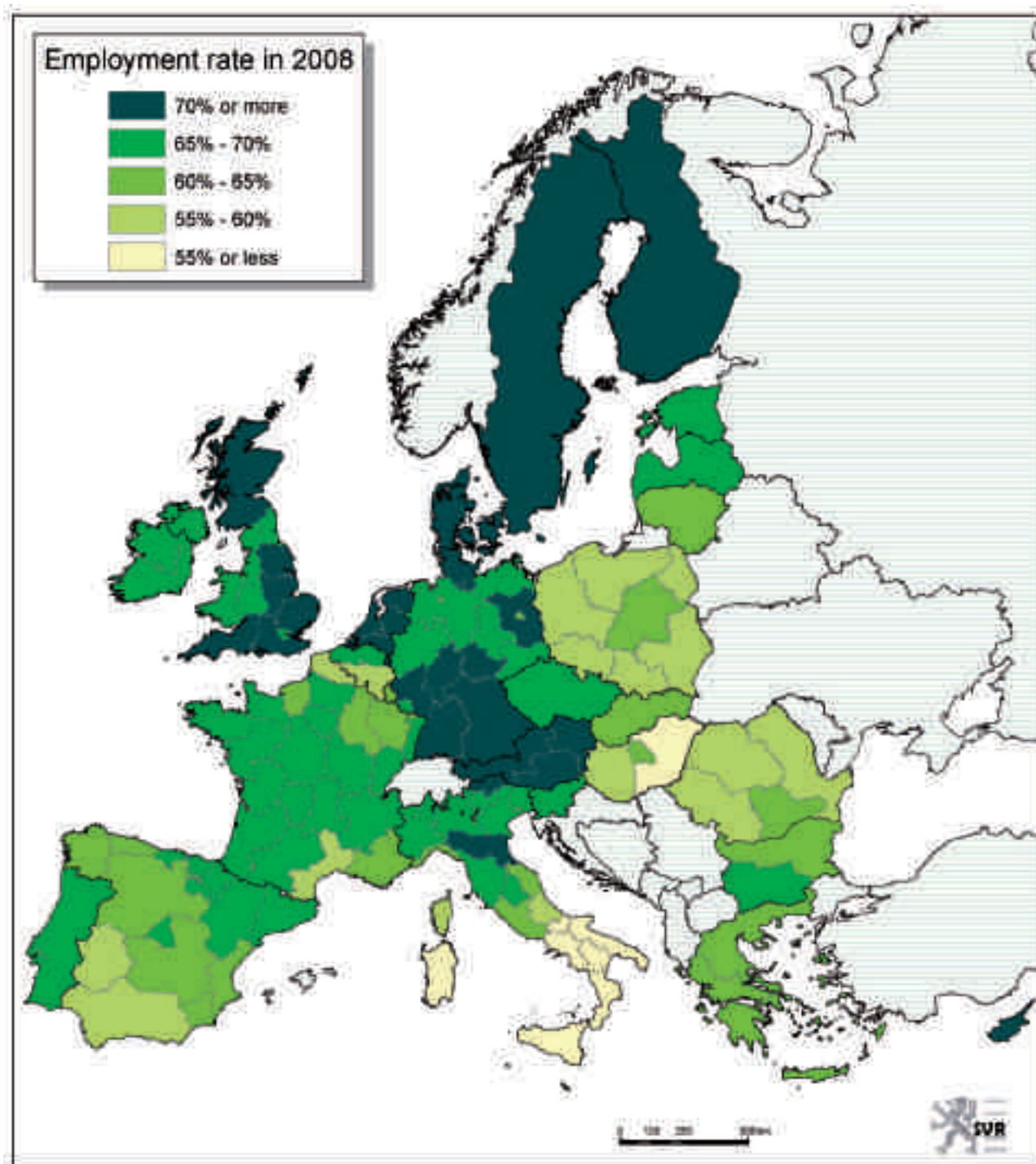
According to Eurostat, the Flemish **employment rate** did not exceed 66.5% in 2008. This is one of Flanders' weaknesses in this benchmark comparison (worst performance out of 16). Over a period of nine years the Flemish employment rate accrued, albeit slower than that of most other regions: at the end of the nineties the Basque Country and Midi-Pyrénées had a lower employment rate than Flanders. However, since then Flanders has been overtaken by these two regions. Denmark (78.1%) and the 3 Dutch areas are leading in this respect. Flanders ranks in the 64th place within the broader group that includes all the European regions. Throughout the years Flanders lost several places (46th in 1999). The aforementioned top regions also lead the EU benchmark. The employment rate is especially low in the South Italian regions.

Graph 7: Employment rate in 1999 and in 2008 (in %)



Source: Eurostat, Research Centre of the Flemish Government

Map 3: Employment rate in 2008



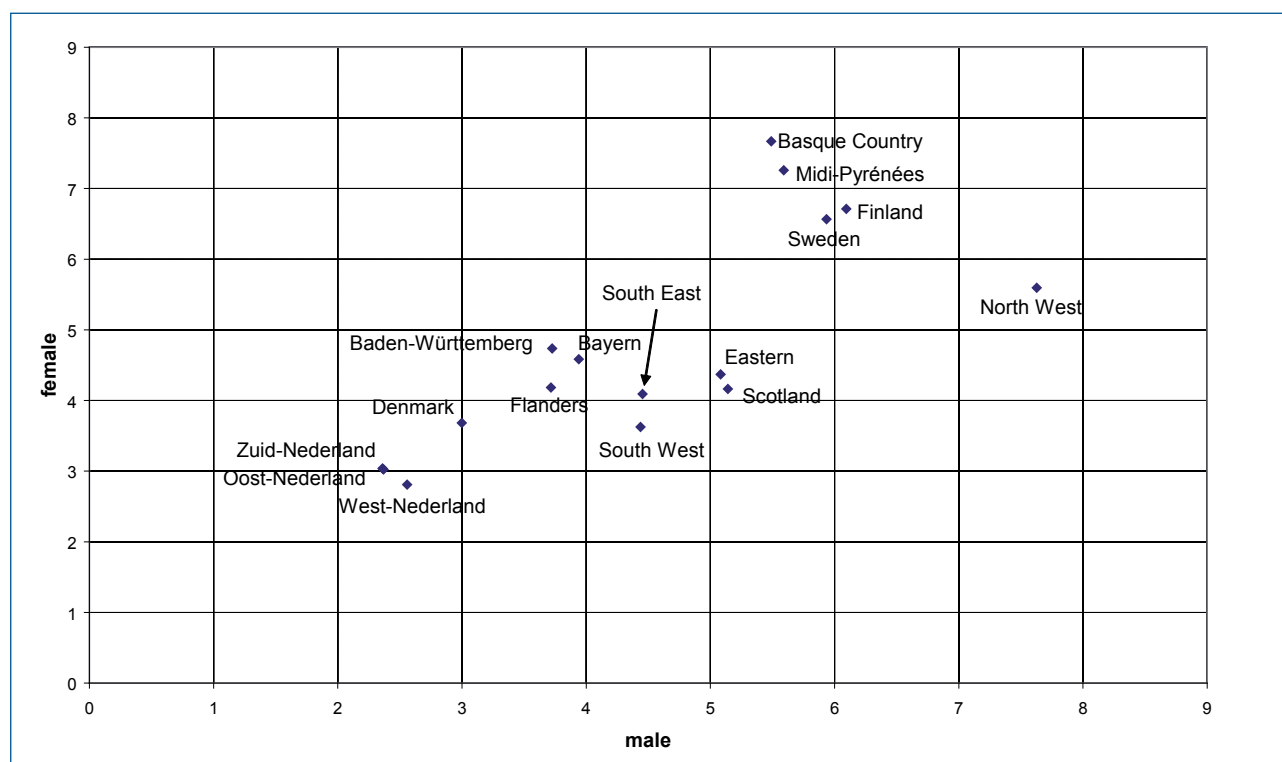
The employment rate in the age category 55 to 64 is also the lowest in Flanders (34.3% in 2008) amongst 16 benchmark regions. The differences in this group are more outspoken. Sweden takes the lead (70.1%). Most benchmark areas score about 50 to 60%. Low values are recorded in the Basque Country (45.0%) and Midi-Pyrénées (41.7%). However, these values are still remarkably higher than those in Flanders, despite the efforts Flanders has made (23.8% in 1999). Amongst the 131 EU regions Flanders ranks in the 107th position. This is worse than in the ranking of the total employment rate. Still, since 1999 its position in the age category 55 to 65 has improved.

On the other hand, Flanders has quite a low unemployment rate (3.9% in 2008). Since 2004 this indicator has steadily declined. Flanders now ranks 5th among the benchmark areas. The Dutch regions

and Denmark have lower rates. Every benchmark region has a lower unemployment rate than the EU-27 or EU-15. The highest rates are recorded in the British North West (6.7%) and Finland, the Basque Country and Midi-Pyrénées (all 6.4%). Throughout the years Flanders has been able to improve its position. In the broader EU ranking Flanders holds the 16th position. Again, this is better than a few years ago (e.g. 32nd in 2005 !). No data are available yet for 2009, but there is no doubt that the unemployment situation will have worsened significantly as a result of the financial-economic crisis.

Both in absolute and relative terms, the male unemployment rate is better than the female rate in Flanders (3.7% versus 4.2% in 2008).

**Graph 8: Male and female unemployment rates in 2008 (in %)**



Source: Eurostat, Research Centre of the Flemish Government

The Flemish **long-term unemployment** rate amounted to 1.4% in 2008, which placed Flanders in the 11<sup>th</sup> position amongst the 16 European benchmark areas. However, the percentage point differences are generally not big. In the EU list Flanders holds position 29. The long-term unemployment rate is the highest in the cities of Berlin (9.4%) and Brussels (8.9%) as well as in Sachsen-Anhalt (9.3%).

The **share of part-time employment** in most benchmark regions ranges between 20 and 30% (Flanders: 23.4% in 2008). The Dutch regions are notable exceptions (45-50%). This indicator is low, however, in the Basque Country and Finland (about 13%).

The share of **self-employed people in the workforce** amounted to 14.3% in Flanders in 2008. This is rather high in comparison to other benchmark areas (4th place). The Basque Country has the highest share (19.5%). In the ranking of all the 131 European regions Flanders is listed 65th. Although self-employment may be an indication of entrepreneurial activity, it can indeed also indicate that there are few opportunities for employees to find work. This probably explains the high values in countries such as Greece and Romania.

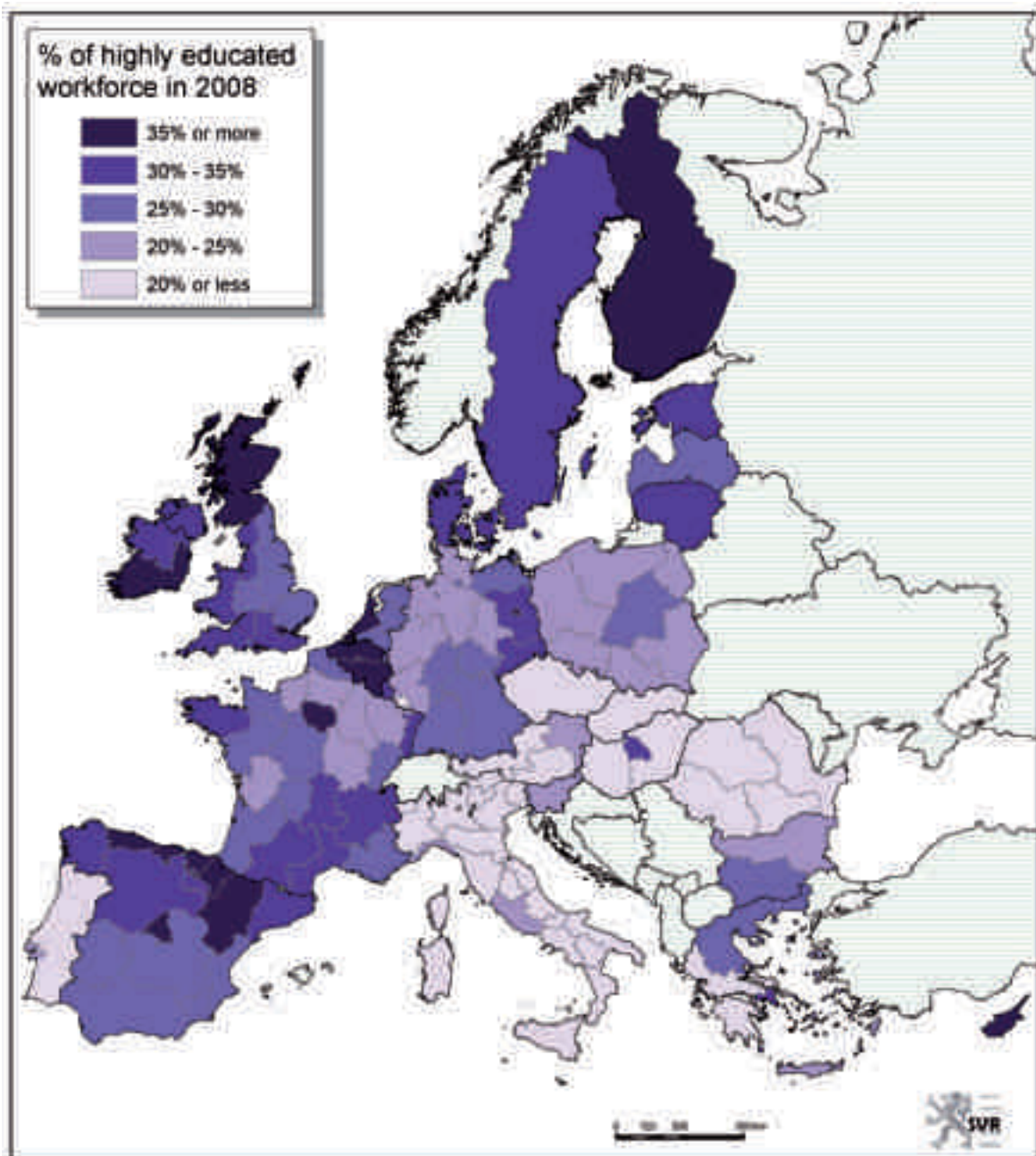
## 4 INNOVATION

The different innovation indicators are grouped into five broad categories, reflecting the stages of the innovation process .

### 4.1 Prerequisites to innovation

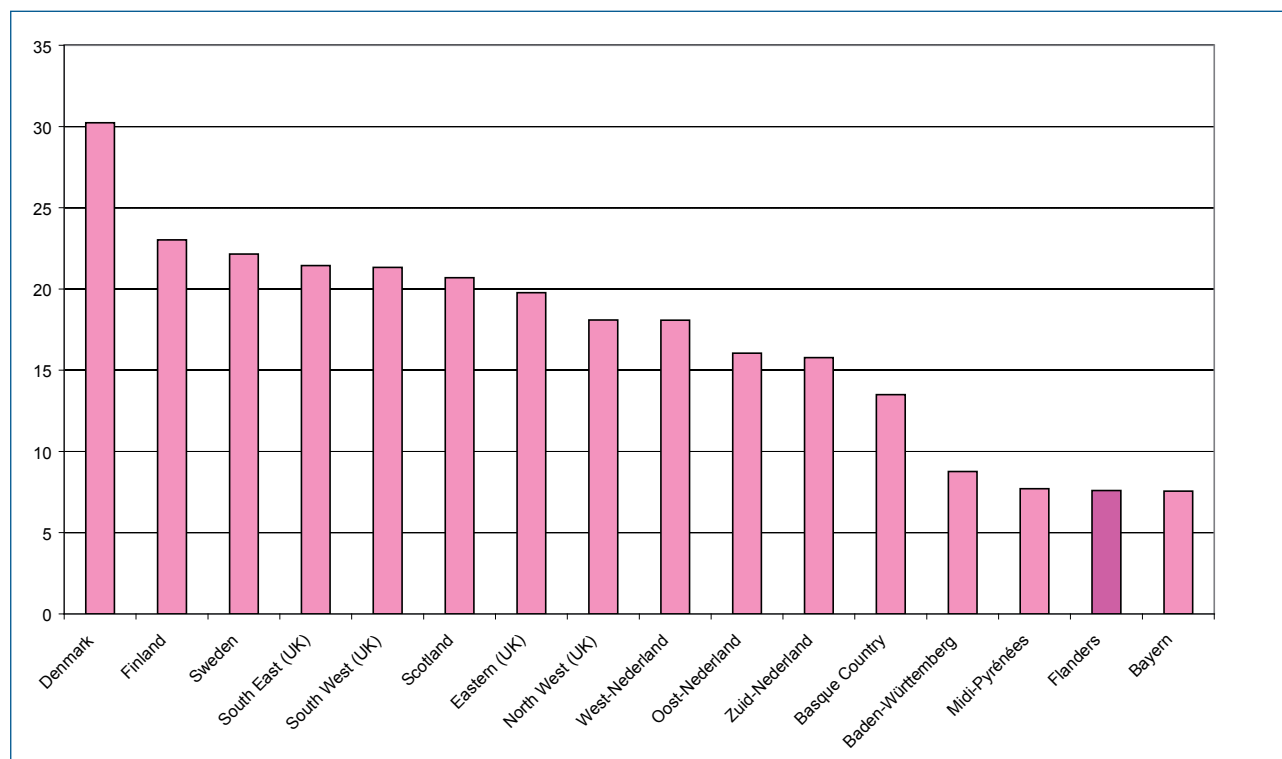
A **highly educated workforce** is another feature of the Flemish economy. The share of the workforce with tertiary education amounted to 37.0% in 2008, as a result of which Flanders occupied 3rd position among the benchmark areas. Only the Basque Country (48.1%) and Scotland (38.0%) performed better. This indicator was the lowest in the two German Länder concerned. The share of tertiary educated workers increased in each of the regions. Flanders was ranked 5th in 1999, which means that it progressed more rapidly than the other regions. In a broader European context Flanders occupies the 13th position. Especially some capital areas have higher rates.

Map 4: % of highly educated workforce in 2008



Flanders performs less well, however, for the second indicator: in 2008, 7.6% of the Flemish **adult population participated in lifelong learning**. Together with Bayern, Flanders is at the bottom of the benchmark ranking. Since 2005 this indicator has gradually deteriorated. The British and Scandinavian regions have clearly higher scores (Denmark: 30.2%, Finland: 23.0%). The German Länder and Midi-Pyrénées also have a ratio below 10%. In a ranking of all European regions, the Flemish result is mediocre (64rd place). Again, the position of Flanders worsened over time. The Scandinavian and British regions take the lead in the broader ranking as well.

Graph 9: Participation in lifelong learning in 2008 (in %)

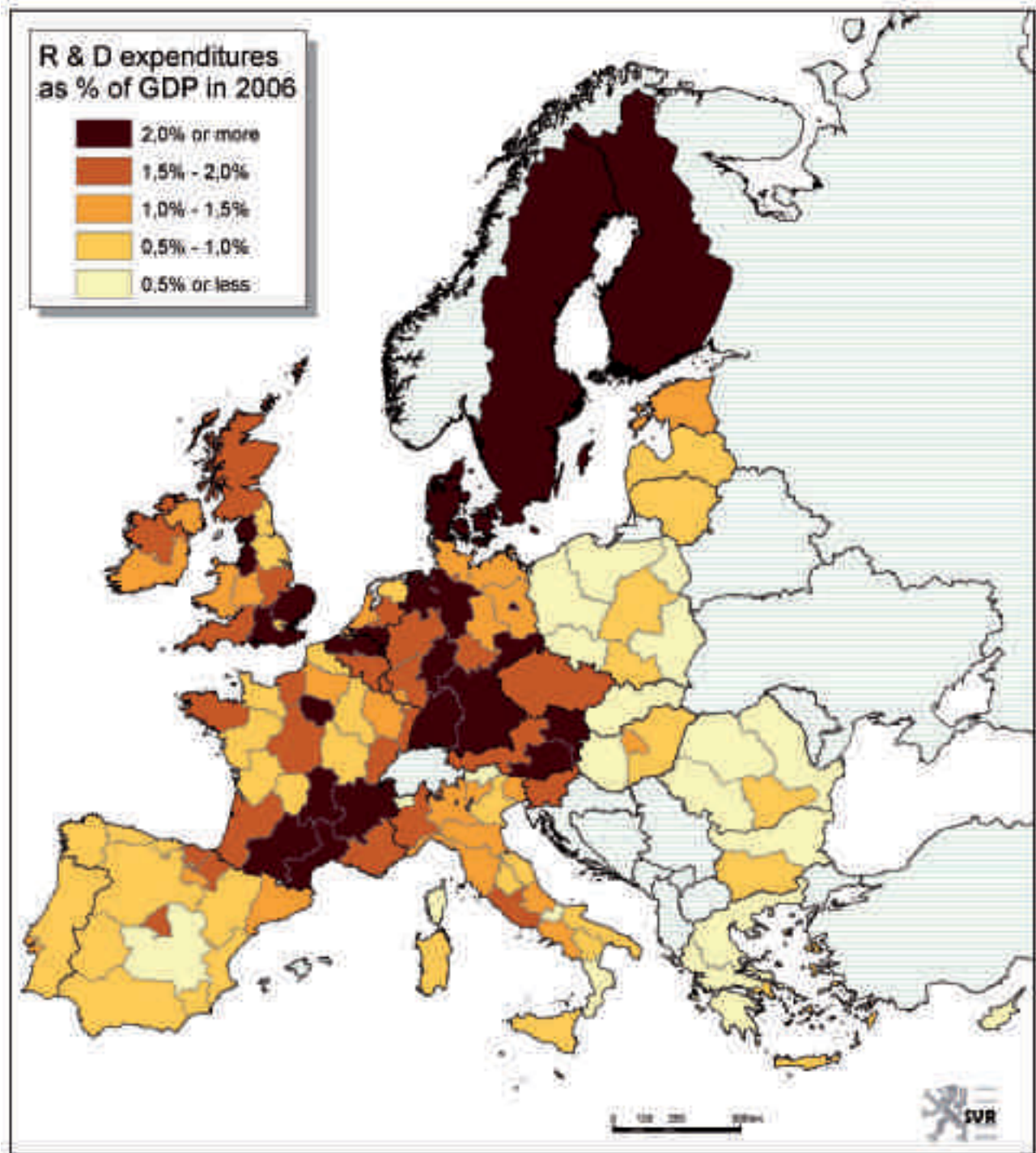


Source: Eurostat, Research Centre of the Flemish Government

## 4.2 Creation of knowledge

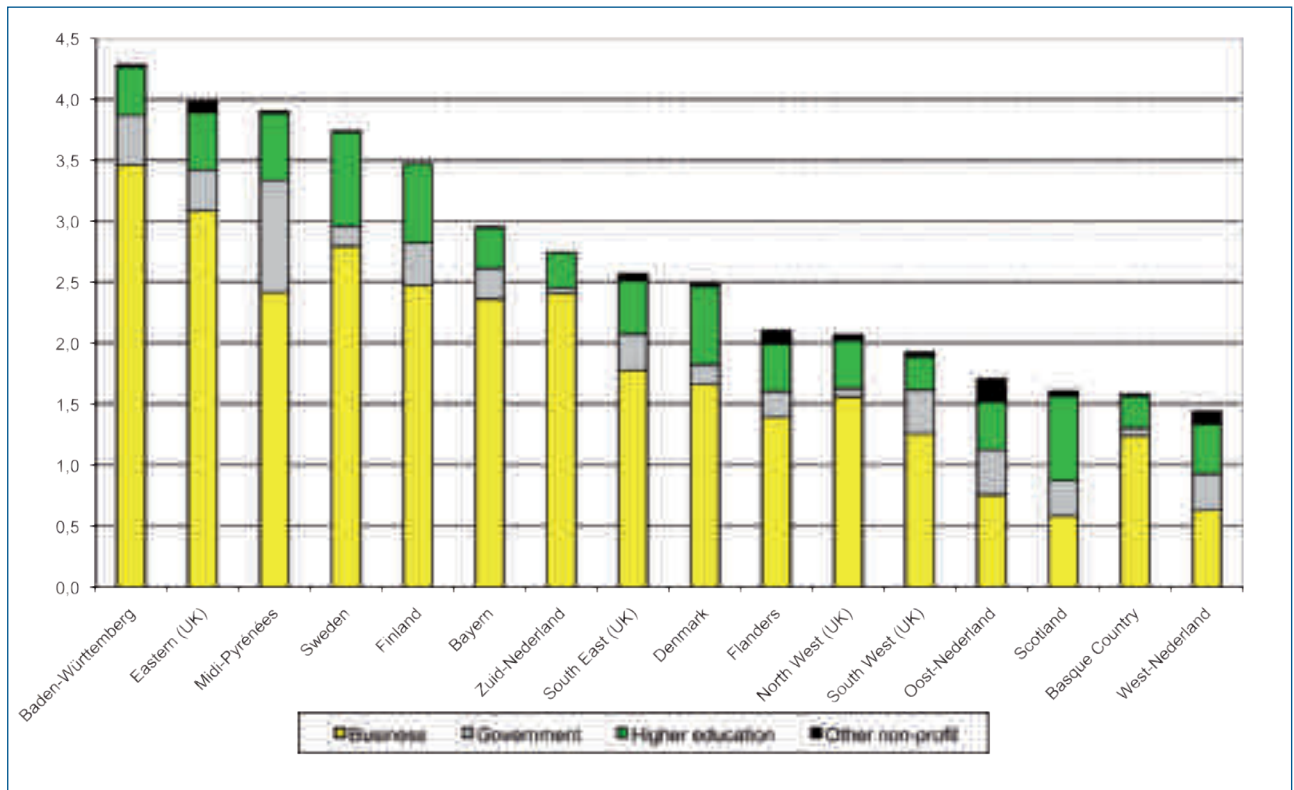
According to Eurostat figures, Flemish **R&D expenditure** amounted to 2.10% of the GDP in 2006. As a result, Flanders holds the 10th position in the benchmark listing. It has held this position for 8 consecutive years now. The leading benchmark regions are Baden-Württemberg (4.28%), Eastern UK (3.98%), Midi-Pyrénées (3.90%), Sweden (3.74%) and Finland (3.47%). This contrasts with the rather low figures for West-Nederland (1.44%), the Basque Country and Scotland (about 1.6%). Around the turn of the century Flemish R&D expenditure was relatively higher. Following a subsequent decline, the indicator slightly rose again in 2005 and 2006. In the broader ranking Flanders was placed 20th in 2006, which is rather good. The best performing benchmark regions also lead the EU ranking.

Map 5: R&D expenditure as a % of GDP in 2006



There are no big differences in the position of Flanders with respect to business, government or higher education R&D. Business R&D accounts for the greater part of expenditure. Relatively speaking, this is the highest in Baden-Württemberg (3.46%), Eastern UK (3.09%) and Sweden (2.79%). The government R&D ranking is headed by Berlin (1.11%) and Midi-Pyrénées (0.92%). As far as higher education R&D is concerned, the top regions are Berlin (0.86%), Sweden (0.77%) and Südösterreich (0.72%).

Graph 10: R&D spending as a proportion of GDP in 2006 (in %)



Source: Eurostat, Research Centre of the Flemish Government

### 4.3 Innovation and entrepreneurship

Entrepreneurship is measured by the Global Entrepreneurship Monitor (GEM). One of the main indicators resulting from this survey is the **Total Entrepreneurial Activity (TEA) rate**. This is the share of the adult population that is currently setting up a business or running a young business.

*Table 1: Total Entrepreneurial Activity (TEA) rate in the benchmark regions (in %)*

	2005	2006	2007	2008
Flanders	3.7	3.0	3.4	3.0
Denmark	4.8	5.3	5.4	4.4
Baden-Württemberg*	4.6		n.a.	n.a.
Bayern*	5.5		n.a.	n.a.
Basque Country	5.4	5.4	6.4	6.9
Netherlands**	4.4	5.4	5.2	5.2
France***	5.4	4.4	3.2	5.6
Finland	5.0	5.0	6.9	7.3
Sweden	4.0	3.5	4.2	n.a.
North West (UK)	4.6	4.9	5.3	5.5
Eastern (UK)	5.4	5.7	6.1	7.3
South East (UK)	6.9	6.2	5.3	5.5
South West (UK)	6.9	7.6	6.5	5.9
Scotland	5.8	4.2	4.6	4.5

Source: Global entrepreneurship Monitor.

\* average for 2005/2006

\*\* no data for the Dutch regions

\*\*\* no data for the French regions

According to the Monitor, entrepreneurial activity in Flanders is moderate. Although some data are lacking for a number of regions, Flanders has the lowest TEA. Yearly variations are to a certain degree due to the sampling process. Finland, the Eastern UK and the Basque Country are top performers in this ranking.

The TEA is only a measure for new entrepreneurship. The generational takeover of businesses, which is common practice in Flanders, is not taken into account.

### 4.4 Application of innovation

In order to have an innovative economy, there must be a sufficient number of **people working in knowledge-intensive companies or branches**. These are defined as having a high R&D percentage with respect to turnover. It basically concerns companies in the medium-high-tech or high-tech industry or high-tech services (e.g. construction of telecommunication equipment, chemistry, computers, electrical appliances, research,...). In 2007, 11.4% of the Flemish labour force was working in these sectors. As a result, Flanders is ranked 6th among the benchmark regions. Baden-Württemberg (21.6%) outranks every other area. Bayern also has a high R&D % (16.5%). The Basque Country, South East UK and Finland are also preceding Flanders. This means that the Basque Country is doing well, since in 1995 it still ranked after Flanders. The 3 Dutch areas and Scotland are occupying the last positions. Over the years the R&D percentage in Flanders did not change much; in 1995 it was still

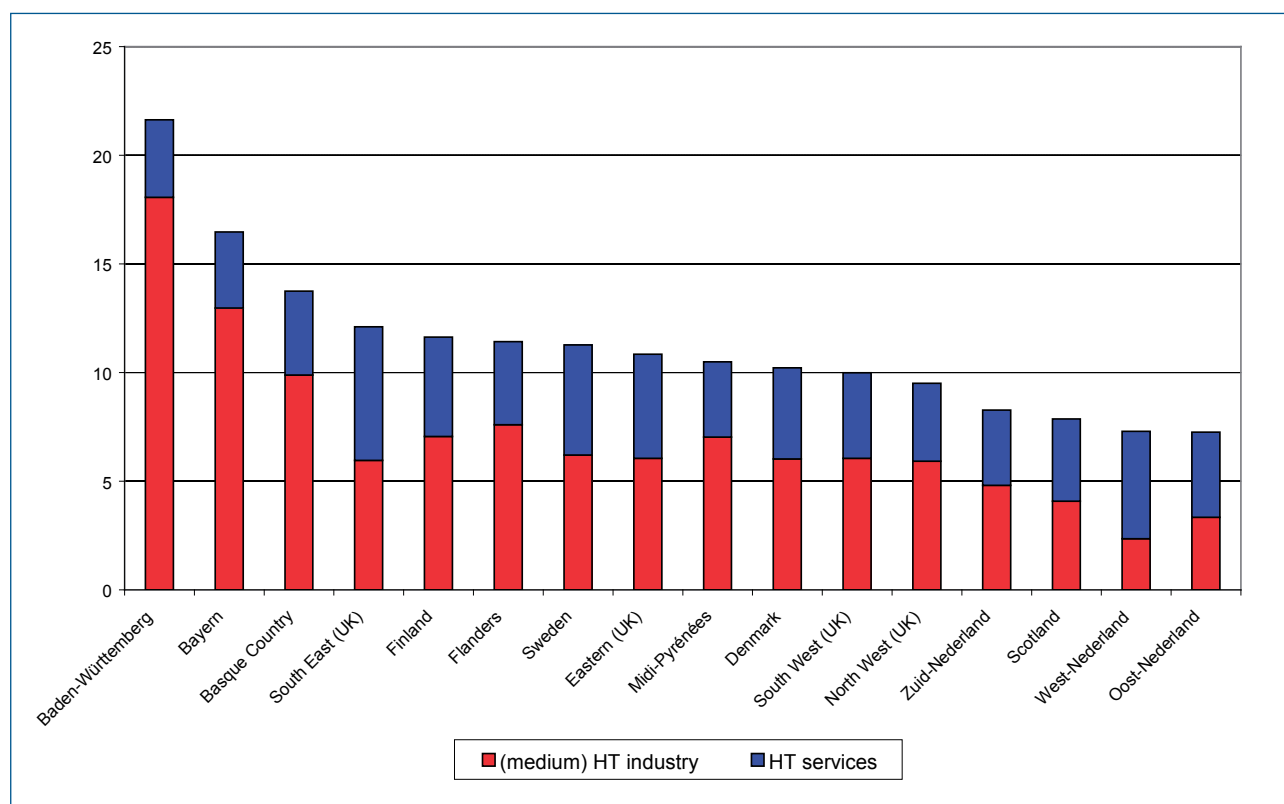


12.0%. In the whole EU ranking Flanders occupies 27th place. Baden-Württemberg also leads the broader ranking.

In the subcategory of the medium-high-tech and high-tech industry Flanders performs better in the benchmark comparison (7.6% in 2007 or 4th place). Again, the two German benchmark Länder take the pole position, followed by the Basque Country. In the ranking of all the EU regions Flanders is listed 34th. This is due to the fact that in quite a large number of the new Member States the industrial sector has a relatively great weight in the economy.

In the sector of the high-tech services the outcome is the opposite: Flanders occupied 10th place in 2008. South East UK (6.1%) and Sweden (5.1%) take the lead. But in the broader EU ranking Flanders is 27th. Capital regions usually perform well on this indicator. Furthermore, knowledge-intensive market services are not a Flemish speciality (15th place in 2008). The reason for this is that these activities prosper more in Brussels which performs such a function for a broader hinterland, including Flanders. In the list of knowledge-intensive financial services Flanders ranked 7th in 2008 (3.7%), which is not bad given the importance of those activities in neighbouring Brussels. The British benchmark regions excel in this domain. In the broader ranking Luxemburg (10.5%) is the top region, with no real challengers.

Graph 11: Share of knowledge-intensive workers in 2007 (in %)



Source: Eurostat, Research Centre of the Flemish Government

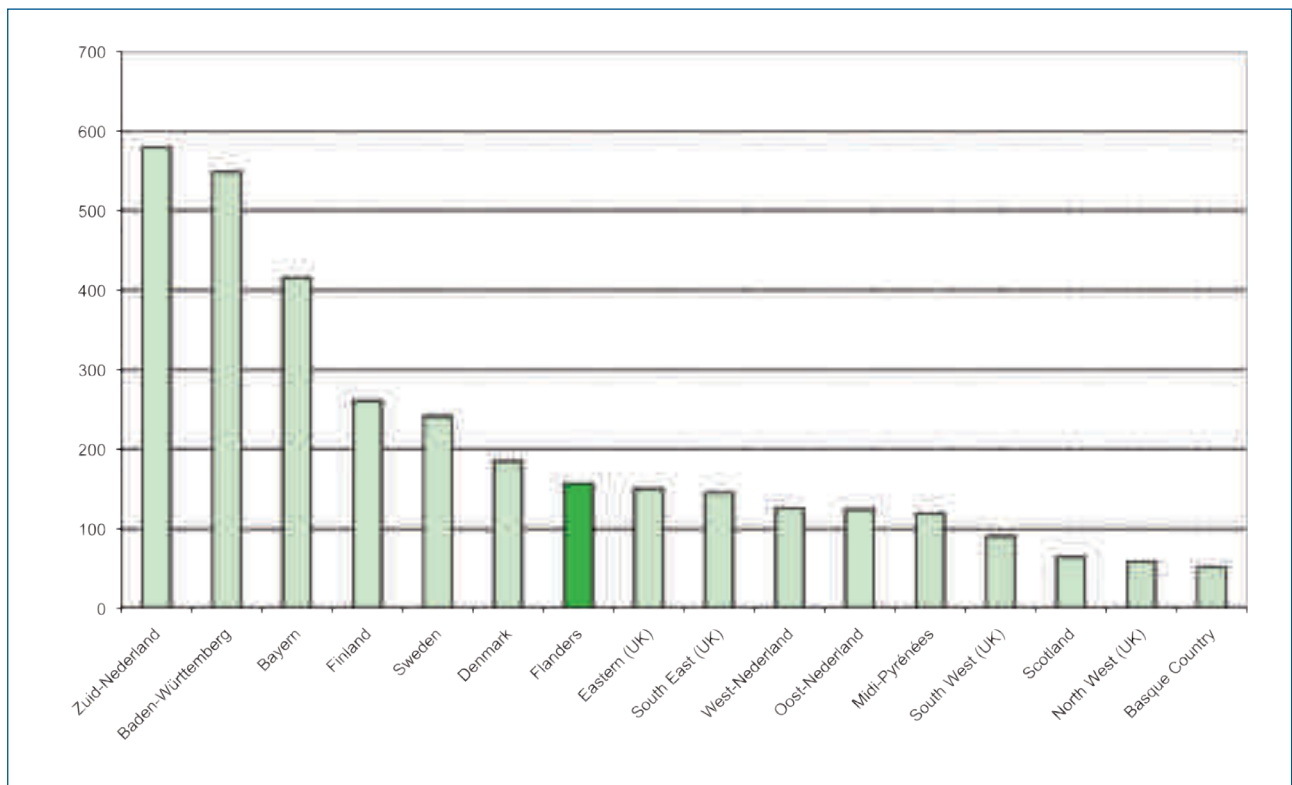
In 2008, 42.6% of the Flemish labour force was **working in creative industries**. As a result, Flanders occupies 9<sup>th</sup> position in the benchmark list. In particular the Dutch and Scandinavian regions as well as Midi-Pyrénées are performing better. There are no big differences between the regions. The indicator has been slightly decreasing in Flanders since 3 years, which is being reflected in a worsening ranking position (also in the broader list where Flanders is 21<sup>st</sup> in 2008). Capital regions generally are hubs of creative economies.

## 4.5 Intellectual property

The final step in the innovation process is the **patent application**. Some caution is needed in the interpretation of these data: not all research automatically results in a patent application.

In 2004, 157 patent applications per million inhabitants were submitted in Flanders. This is mediocre in comparison to the benchmark regions (7<sup>th</sup> place). In this ranking a top three can clearly be distinguished: Zuid-Nederland, Baden-Württemberg and Bayern have ratios of more than 400 per million inhabitants. The Basque Country (52 patent applications), North West UK (59) and Scotland (64) are not specialised in this matter. During the last years Flanders has been successful in increasing this ratio. This is reflected in a higher ranking position (from 9<sup>th</sup> in 2003 to 7<sup>th</sup> in 2004). Among all the European regions Flanders can be found on a 19<sup>th</sup> position.

Graph 12: Number of patent applications per million inhabitants in 2004



Source: Eurostat, Research Centre of the Flemish Government

## 5 CONCLUSION

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Flanders is a prosperous region. However, this does not guarantee the future generation of prosperity. That is why Flanders must develop into an innovation-oriented economy. It has been determined on the basis of technological and innovative indicators that 15 regions are ahead of Flanders. Therefore, these regions have been used as benchmark areas.

With a GDP per head of € 27,859 PPS, Flanders ranked in 9<sup>th</sup> place on the list of benchmark regions in 2006. Flanders owes a great deal to its high labour productivity. The number of jobs is relatively moderate due to the economic hub of neighbouring Brussels. As a result, many Flemish workers who commute to the Brussels Capital Region contribute to the Brussels GDP, but take their income home to where they live. The share of people aged 15-64 is not a Flemish asset either.

The employment rate is relatively low in Flanders, in particular among the older age categories. The unemployment rate on the other hand is quite low in Flanders: only 4 benchmark regions do better.

The position of Flanders in the innovation process is mixed: although a well-educated workforce is clearly an asset, Flemish workers are still insufficiently participating in lifelong learning (according to Eurostat data). Most benchmark regions have a higher R&D percentage. This is not surprising, since this was one of the indicators used to determine the better performing regions. In a broader list comprising all the EU-27 regions Flanders ranked 20<sup>th</sup> in 2006, which is rather good. New entrepreneurship is less common in Flanders, especially compared to the benchmark areas. However, this is an important prerequisite for using the results of the innovation process in an economy. Flanders is doing moderately well in terms of the number of workers in knowledge-intensive sectors. The same goes for the number of patent applications. In order to enhance our future capacity to generate prosperity, some of these aspects must continue to be tackled. This is even more urgent because many countries and regions are aware of the importance of innovation as a driving force behind prosperity.



## Annex 1: Key indicators for Flanders and the benchmark regions

	Population	Population density (inhabitants / km <sup>2</sup> )	Employment rate (in %)	Employment rate people aged 55-64 (in %)	Unemployment rate (in %)	Long-term unemployment rate (in %)
	2006	1/01/2007	2008	2008	2008	2008
Flanders	6,098,000	452	66.5	34.3	3.9	1.4
Denmark	5,437,300	126	78.1	57.0	3.3	0.5
Baden-Württemberg	10,737,200	300	75.1	60.5	4.2	1.7
Bayern	12,480,700	177	75.0	56.6	4.2	1.8
Basque Country	2,118,600	294	67.9	45.0	6.4	1.5
Midi-Pyrénées	2,791,400	62	67.8	41.7	6.4	2.0
Oost-Nederland	3,464,900	316	78.3	53.9	2.7	0.9
West-Nederland	7,632,500	643	77.4	54.2	2.7	0.9
Zuid-Nederland	3,547,400	486	76.8	50.8	2.7	1.0
Finland	5,239,400	16	71.0	56.4	6.4	1.2
Sweden	9,080,500	21	74.3	70.1	6.2	0.8
North West UK	6,852,600	486	68.7	54.6	6.7	1.9
Eastern UK	5,609,300	295	74.4	61.4	4.8	1.0
South East UK	8,242,200	434	76.0	64.1	4.3	0.8
South West UK	5,128,200	216	75.2	62.2	4.1	0.7
Scotland	5,118,200	66	72.7	57.2	4.7	1.0

	GDP per head (in € PPS)	Labour productivity (in € PPS per worker)	Number of jobs / people aged 15-64 (in %)	Share of people aged 15-64 (in %)	Unit labour cost	Disposable income per head (in € PPS based on the final consumption)
	2006	2006	2006	2006	2004	2006
Flanders	27,859	68,507	61.7	65.9	0.56	16,548
Denmark	29,049	55,970	78.5	66.1	0.64	12,754
Baden-Württemberg	30,507	60,286	76.4	66.3	0.59	19,264
Bayern	32,245	62,672	77.5	66.4	0.53	18,715
Basque Country	31,592	62,552	73.2	69.0	0.54	18,724
Midi-Pyrénées	23,650	59,278	62.2	64.1	0.58	15,414
Oost-Nederland	25,897	68,152	56.9	66.8	0.61	13,628
West-Nederland	33,772	79,349	62.7	67.9	0.58	14,967
Zuid-Nederland	30,121	75,004	59.5	67.5	0.57	14,626
Finland	27,104	58,238	69.9	66.6	0.55	12,396
Sweden	28,706	58,942	74.3	65.5	0.62	14,058
North West UK	24,744	50,111	75.7	65.3	0.63	16,019
Eastern UK	26,842	54,866	75.5	64.8	0.58	18,702
South East UK	30,233	56,356	82.3	65.2	0.58	20,089
South West UK	26,078	51,213	79.7	63.9	0.60	17,669
Scotland	27,382	53,717	76.7	66.4	0.63	16,822

	Share of highly educated workers (in %)	Share of adult population involved in lifelong learning (in %)	Total R&D expenditure / GDP (in %)	Business R&D expenditure / GDP (in %)	Government R&D expenditure / GDP (in %)	Share of workers in knowledge-intensive sectors (in %)	Share of workers in (medium) HT industry (in %)	Share of workers in HT services (in %)	Share of workers in creative sectors (in %)	Number of patent applications per million inhabitants
	2008	2008	2006	2006	2006	2007	2007	2007	2008	2004
Flanders	37.0	7.6	2.1	1.39	0.21	11.4	7.6	3.8	42.6	157
Denmark	32.8	30.2	2.5	1.66	0.16	10.2	6.0	4.2	45.1	185
Baden-Württemberg	27.2	8.8	4.3	3.46	0.41	21.6	18.1	3.6	40.8	548
Bayern	26.4	7.6	3.0	2.36	0.25	16.5	13.0	3.5	42.2	415
Basque Country	48.1	13.5	1.6	1.24	0.06	13.7	9.9	3.9	41.2	52
Midi-Pyrénées	33.9	7.7	3.9	2.42	0.92	10.5	7.0	3.5	44.7	120
Oost-Nederland	28.9	16.0	1.7	0.76	0.37	7.3	3.3	3.9	46.5	124
West-Nederland	35.1	18.1	1.4	0.63	0.30	7.3	2.4	4.9	50.3	126
Zuid-Nederland	29.5	15.8	2.7	2.41	0.05	8.3	4.8	3.5	45.3	579
Finland	36.5	23.0	3.5	2.48	0.35	11.6	7.1	4.6	44.6	261
Sweden	31.5	22.1	3.7	2.79	0.17	11.3	6.2	5.1	44.7	242
North West UK	31.3	18.1	2.1	1.56	0.07	9.5	5.9	3.6	38.0	59
Eastern UK	29.0	19.8	4.0	3.09	0.33	10.8	6.0	4.8	42.5	150
South East UK	34.4	21.4	2.6	1.78	0.30	12.1	6.0	6.1	46.5	145
South West UK	31.1	21.3	1.9	1.26	0.36	10.0	6.1	3.9	42.2	90
Scotland	38.0	20.7	1.6	0.58	0.29	7.9	4.1	3.8	39.2	64

Source: Eurostat, Research Centre of the Flemish Government.





## Annex 2: Top performers of the whole set of 131 regions in comparison with the EU27 and Flanders

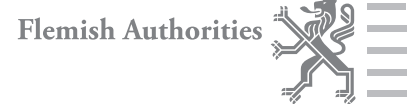
		Top region			Flanders			
		Name	Value	Average EU27	Recent value	2000		Trends
<b>LABOUR MARKET INDICATORS</b>								
Population density (inhabitants / km <sup>2</sup> )	1-01-07	Brussels Capital Region	6.405	113	452	439		+
Employment rate (in %)	2008	Oost-Nederland	78,3	65,9	66,5	63,9		+
Employment rate people aged 55-64 (in %)	2008	Sweden	70,1	45,6	34,3	25,6		+
Unemployment rate (in %)	2008	Provincia Autonoma Bolzano	2,4	7,0	3,9	4,3		+
Long-term unemployment rate (in %)	2008	Westösterreich	0,4	2,6	1,4	1,7		+
<b>ECONOMIC INDICATORS</b>								
GDP per head (in € PPS)	2006	Luxembourg	63.109	23.624	27.859	23.693		+
Labour productivity (in € PPS per worker)	2006	Luxembourg	93.497	52.884	68.507	59.910		+
Number of jobs / people aged 15-64 (in %)	2006	Luxembourg	99,9	66,7	61,7	59,8		+
Share of people aged 15-64 (in %)	2006	Slovakia	71,8	67,0	65,9	66,2		-
Unit labour cost	2004	Severna i iztochna Bulgaria	2.777	29.315	41.488	36.958		-
Disposable income per head (in € PPS based on the final consumption) (1)	2006	Hamburg	23.144	n.a.	16.548	14.864		+
<b>INNOVATIVE INDICATORS</b>								
Share of highly educated workers (in %)	2008	Brussels Capital Region	49,1	26,8	37,0	32,0		+
Share of adult population involved in lifelong learning (in %)	2008	Denmark	30,2	9,3	7,6	6,7	(2)	+
Total R&D expenditure / GDP (in %)	2006	Baden-Württemberg	4,28	1,86	2,10	2,22		-
Business R&D expenditure / GDP (in %)	2006	Baden-Württemberg	3,46	1,16	1,39	1,69		-
Government R&D expenditure / GDP (in %)	2006	Berlin	1,11	0,27	0,21	0,16		+
Share of workers in knowledge-intensive sectors (in %)	2007	Baden-Württemberg	21,6	10,0	11,4	12,4		-
Share of workers in (medium) HT industry (in %)	2007	Baden-Württemberg	18,1	6,7	7,6	8,6		-
Share of workers in HT services (in %)	2007	Comunidad de Madrid	6,7	3,3	3,8	3,8		0
Share of workers in creative sectors (in %)	2008	Île-de-France	54,9	38,2	42,6	40,9	(3)	+
Number of patent applications per million inhabitants	2004	Zuid-Nederland	579	110	157	128		+

(1) data for some regions are lacking

(2) 2002 instead of 2000

(3) 2001 instead of 2000

Source: Eurostat, Research Centre of the Flemish Government.



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